

A NEW VARIETY OF *ANOPHELES* *MARSHALLI*, FROM SIERRA LEONE

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PLATE VIII

During a recent survey of the *Anophelini* in and around Freetown, Professor Blacklock and the author collected several larvae which gave rise to an *Anopheles* apparently related to *A. marshalli* Theo., but differing from it and its allies in certain characters. Further, the larvae were markedly distinct from those of *A. marshalli*, possessing palmate hairs on the thorax as well as on the first two segments of the abdomen, and it seems probable that larval characters will be found to be a good means of separating the closely allied species of the *marshalli* group.

Anopheles marshalli var. *freetownensis* n.var. (Plate VIII).

A variety of *A. marshalli* having the mesonotum chiefly clothed with hairs and the tarsi entirely dark.

FEMALE.

Head: occiput with the usual anterior-median white upright-forked scales and black or dark brown ones behind. *Palpi* with three white bands, the proximal one narrow and the two distal ones very broad and equal in length, apex white. Distal bands separated by about half the length of one of them, and extending so as to occupy rather more than the distal third of the palp. *Thorax*: integument dark greyish-brown, a thick group of long and narrow, curved white scales in the middle in front, rest of mesonotum clothed with pale brown hairs, interspersed with a few rather long, very narrow, curved, pale scales, the scales rather more numerous at the sides. *Abdomen*: blackish-brown with fine dark brown hairs. *Legs*. Entirely dark except apices of femora and tibiae which are

obscurely pale. *Wings* (Pl. VIII): costa with six dark areas, the fifth rather long. First vein with light and dark areas coinciding with those of costa on distal half, but the white areas more extensive basally; second vein with two white spots on the stem, one at the bifurcation and two on the upper branch; third vein with two dark areas, a large one sub-basally and a small one sub-apically; fourth vein with a large and a small white area on the stem, and one at the bifurcation, both branches white at the apex, the upper with an additional small white spot; fifth vein with the stem mostly white-scaled, one dark area towards the base and a large one at the bifurcation involving the base of the upper fork, which has two more dark areas, lower branch white on basal two-fifths and at apex; sixth vein with two large white areas on basal half, distal half dark. Fringe at the apex of the wing largely white, but a small dark spot present just above the apex of the lower branch of the second vein. White spots at the apices of the branches of the fourth and fifth vein, but not at the apex of the sixth. Scales relatively rather short and narrow, the longer lateral squames near the apex of the third vein measuring 0.05 mm. in length, and having the greatest width about one-fifth to one-fourth of the length, and five or six striae. Wing length *c.* 3.5 mm.

MALE.

Palpi. Long segment with sub-median ring and apex white; last two segments white-scaled with narrow, basal black rings. Other scale characters as in female except that the wing scales are shorter and less dense.

Type: ♂ and ♀, bred from larvae taken in a stream, Kissy Bridge, near Freetown, Sierra Leone, 2.VII.25, Professor D. B. Blacklock and A. M. Evans. Other specimens, thirteen ♂♂ and fourteen ♀♀ from this and other localities near Freetown. Types in the collection of the Liverpool School of Tropical Medicine.

Variation. The most marked variation was exhibited by a female specimen in which the wings were considerably darker than in the majority of specimens. In the first vein the basal white area was interrupted by a dark spot opposite that on the costa, and the upper branch of the second vein was entirely dark.

The larva will be described in a joint paper by Professor Blacklock and the author, which is shortly to be published in these ANNALS.

EXPLANATION OF PLATE VIII

Anopheles marshalli var. *freetownensis* n. var

Wing of female.

(The width of the white scales is slightly exaggerated.)



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